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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|-----------------------------|------------------|
| 09/841,189 | 04/25/2001 | Govind Malalur | 108339-00000 | 3654 |
| 32294 | 7590 | 09/28/2005 | | |
| SQUIRE, SANDERS & DEMPSEY L.L.P. 14TH FLOOR 8000 TOWERS CRESCENT TYSONS CORNER, VA 22182 | | | EXAMINER NGUYEN, BRIAN D | |
| | | | ART UNIT 2661 | PAPER NUMBER |

DATE MAILED: 09/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/841,189

Applicant(s)

MALALUR ET AL.

Examiner

Brian D. Nguyen

Art Unit

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 August 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 16,20,27 and 30-32 is/are rejected.
7) ☒ Claim(s) 1-15,17-19,21-26,28 and 29 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 10/18/04 & 4/25/01 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claims 1-26 and 28-29 are objected to because of the following informalities:

Claim 1, lines 16 and 18, "at least two sets of communications channel" seems to refer back to "at least two sets of communications channel" cited in line 13. If this is true, it is suggested to change "at least two sets of communications channel" to --said at least two sets of communications channel--.

Claim 14, lines 16 and 19, "at least two sets of communications channel" seems to refer back to "at least two sets of communications channel" cited in line 13. If this is true, it is suggested to change "at least two sets of communications channel" to --said at least two sets of communications channel--.

Claim 28, line 7, "a common memory" seems to refer back to "a common memory" mentioned in line 9 of claim 27. If this is true, it is suggested to change "a common memory" to -the common memory--.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 16 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 16 recites the limitation "the common memory" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 20 recites the limitation "the common memory" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

5. Claims 27 and 30-31 are rejected under 35 U.S.C. 102(a) as being anticipated by LEVEL ONE (Level One™ IXP1200 Network Processor).

Regarding claim 27, Level One discloses a method of handling data packets in a network switch (see figure 1), the method comprising the steps of: receiving at a data port (any one of the total of 16 ports including 10Mb/100Mb/1Gb, ATM, T1/E1 ports in figure 1 and second paragraph on page 7) an incoming data packet, resolving a destination address of the incoming data packet; discarding, forwarding, or modifying the packet based upon the resolving step (a packet is forwarded to its destination based on the packet's destination address); placing at least a portion of the data packet on a first communication channel, when the packet is to be forwarded; receiving at the data port a section of another data packet on a second communication channel from a common memory (see, for example, SDRAM and SRAM Memory units in figure 1 and 8K Data Cache in figure 2); and forwarding the another data packet from the data port;

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wherein the first and second channels are separate from each other (see, for example, communication channels connected to the data ports using in transmitting and receiving packets to/from the data ports in figure 1); and wherein the steps are performed in a single network switch on a single substrate (see, for example, figure 1 and page 1).

Regarding claims 30 and 31, Level One discloses the switch is configured to perform layer two/three switching at wire speed (see processor description on page 5).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over LEVEL ONE (Level One™ IXP1200 Network Processor) in view of Hegde (6,570,875).

Regarding claim 32, Level One does not specifically disclose updating address information used in forwarding data packets at the plurality of data ports while the address information is received at one data port of the plurality of data port. However, updating address information is well known in the art. Hegde discloses updating address information (see, for example, the abstract). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to update the address information as taught by Hegde in the system of Level One in order to correctly forward the packets to its destination.

Allowable Subject Matter

8. Claims 1-26 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.
9. Claims 28-29 would be allowable if rewritten to overcome the objection set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Response to Arguments

10. Applicant's arguments filed 8/10/05 have been fully considered but they are not persuasive.

The applicant argued that claims 1, 14, and 27 recite, in part, that "the first data port interface, the second data port interface, the CPU interface, the common memory, the memory management unit, and the at least two set of communication channels are embodied on a single substrate." The examiner agrees claim 1 and 14 recite these limitations. However, claim 27 does not recite the second data port interface, the CPU interface, the memory management unit, and the at least two set of communication channels. Therefore, this argument is irrelevant to claim 27.

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

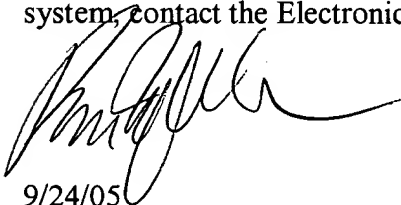
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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian D. Nguyen whose telephone number is (571) 272-3084. The examiner can normally be reached on 7:30-6:00 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (571) 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



9/24/05

BRIAN NGUYEN
PRIMARY EXAMINER